

and condensedly parasitic types of Orobanchaceae." The author cites the genera that represent the various stages in this series, and also describes the progressive changes in the various structures.—J. M. C.

Permeability.—The permeability of *Laminaria agardhii* as affected by anions from various inorganic and organic salts of sodium has been measured by RABER,¹⁵ who used OSTERHOUT's electrical conductivity method. All of the anions increase permeability, following in a general way the HOFMEISTER series. The anions arrange themselves by their effects into several groups; thus the monovalent, bivalent, and trivalent groups can be recognized by the quantitative difference in permeability change with members of each group. The tetravalent anion, $\text{Fe}(\text{CN})_6$, did not produce a fourth group, but this is explained as due to low concentration of the salt. The author believes that the effects of anions on permeability depend upon the valency of the anion, regardless of whether the salts are organic or inorganic.—C. A. SHULL.

A maritime species.—Following the methods employed by BONNIER of dividing individual plants and growing the resulting halves under different climatic conditions, DANIEL¹⁶ in 1902 separated plants of *Asphodelus luteus* growing at Rennes (France) and planted portions of them in a seaside garden at Erquy. As a result of the maritime climate such striking changes resulted in the general form of the plant, in the branching habit of the inflorescence, and in other structural features that at present the seaside forms are sufficiently distinct to be regarded as a distinct species. This derived species he has named *Asphodelus luteoides*. This he believes to be the first recorded instance of maritime conditions transforming a plant to such an extent that the resulting form is entitled to specific rank.—G. D. FULLER.

Animal burrows an ecological factor.—On some small islands in the outer archipelago of Stockholm possessing a humid oceanic climate ROMELL¹⁷ reports that voles eating the grass roots within their burrows upset the ecological equilibrium and cause strips of *Sphagnum* to replace the turf. The irregular mosaic thus formed, however, is not permanent, as the *Sphagnum* seems unable to resist the invasion of the grass.—GEO. D. FULLER.

¹⁵ RABER, O. L., A quantitative study of the effect of anions on the permeability of plant cells. I. Jour. Gen. Physiol. 2:535-539. 1920; II. Amer. Jour. Bot. 8:366-368. 1921.

¹⁶ DANIEL, LUCIUS, Obtention d'une espèce nouvelle d'Asphodèle par l'action du climat marin. Rev. Gen. Bot. 33:225-237, 316-327, 357-371, 420-436. pls. 3. figs. 12. 1921.

¹⁷ ROMELL, L. G., Voles as a factor in plant ecology. Svensk Bot. Tidsk. 15:43-45. 1921.